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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,386

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EXAMINER

READY, BRYAN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,386	Applicant(s) TANAKA ET AL.	
	Examiner Bryan P. Ready	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 17-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20040219</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention I., Claims 1-16, in the reply filed on 17 February 2009 is acknowledged. Accordingly, Claims 17-24 are hereby withdrawn from consideration.

Claim Objections

2. Claims 3, 7 and 13-14 are objected to because of the following informalities: Claims 3 and 14 both provide the claim limitation "beforehand", however, Examiner asserts that this language is not sufficiently clear, and recommends changing the limitation to, for example 'in which specified information/ identification information is saved in any exchangeable main storage means before such exchangeable main storage means is newly installed in the image forming apparatus', as appropriate: Claims 7 and 13, should be revised for clarity to read, for example, 'and the other thereof is provided in a detachable unit other than the one in which the one detachable unit is provided, or in the main body of the apparatus'.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-5, 7, and 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukada (US 2002/0060703).

Regarding Claim 1, Tsukada discloses (Abstract; Figures 1-4) an image forming apparatus (Fig. 1), comprising: administering means (Fig. 2) for administering the life of the apparatus in accordance with administrative information (paragraphs 58-70) on the used state of the apparatus (e.g. "operating time", paragraph 70); main storage means (109/ 221) for renewably saving the administrative information; and auxiliary storage means (135/ 222) for saving the administrative information as auxiliary information, wherein the administering means reads pieces of information saved in the main storage means (109) and the auxiliary storage means (135) if necessary and updates contents of the information in the main storage means (109) and the auxiliary storage means (135) in accordance with the reading result (see Fig. 4, *both the main and auxiliary storage means are updated as necessary in steps S406 and S403, respectively, as required*)

Regarding Claim 2, Tsukada discloses the administrative information and the auxiliary information include index information representing a working amount of the apparatus from a specified reference point in time (paragraph 70), and the administering means saves the administrative information read from the main storage means (109) in the auxiliary storage means (135) as the auxiliary information if the working amount of the apparatus grasped from the index information read from the main storage means (109) is larger than the working amount of the apparatus grasped from the index information read from the auxiliary storage means (Fig. 4, steps S402 and S403;

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paragraph 121; *if the data is backed up to the reserve then it is assumed that this data from the main storage is the most current, i.e. "largest working amount", data stored*)

Regarding Claim 3, Tsukada discloses the main storage means (109) is detachable from the apparatus and exchangeable for another main storage means for exchange (see paragraph 89) in which specified identification information is saved beforehand ("conditions", paragraphs 1-3; *counter values set to 0, initial checksum value, or rewrite flag is 1*), and the administering means saves the auxiliary information read from the auxiliary storage means (135) in the main storage means (109) and deletes the identification information saved in the main storage means (109) when the information read from the main storage means (109) mounted in the apparatus includes the identification information (steps 402, 404 406; paragraph 122 and 125; *where the identification information is information that indicates to the administering means that the main storage has been repaired or replaced, such as counts set to 0, same as default*).

Regarding Claim 4, Tsukada discloses at least one detachable unit (replaceable ink container; paragraph 67) detachably mountable into a main body of the apparatus (101), wherein the administrative information saved in the main storage means (109) includes information on the used state (amount of ink used; paragraph 67) of at least one detachable unit.

Regarding Claim 5, Tsukada discloses at least one developer for containing a developing agent for image formation is mountably constructed as the detachable unit (paragraph 4; *ink cartridge replacement*), and the administrative information and the

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auxiliary information include developer information on the used state of the developer (paragraphs 4, 58, and 67).

Regarding Claim 7, Tsukada discloses the main storage means (109) is provided in one detachable unit and the auxiliary storage means (135) is provided in a detachable unit other than the one in which the main storage means is provided or in the main body of the apparatus (see Fig. 1).

Regarding Claim 9, the method step thereof is met by the operation of the apparatus as disclosed by Tsukada as applied to claim 1 above.

Regarding Claim 10, Tsukada discloses (Abstract; Figures 1-4) an image forming apparatus (Fig. 1), comprising: main storage means (109) detachably mountable (paragraph 122) into a main body (101) of the apparatus and adapted to save administrative information on the used state (paragraph 70) of the apparatus; and administering means (Fig. 2) reading/ writing the administrative information from/ in the main storage means (109) mounted in the apparatus and administering the life of the apparatus in accordance with the administrative information saved in the main storage means (109), wherein the administering means judges whether or not the information read from the main storage means (109) mounted in the apparatus includes identification information (paragraphs 118-120) representing a difference between this main storage means (109) and the main storage means in which the information was written prior to the readout (*for example, identification information where counts are set to 0*), and controls the reading (S402 and S403)/ writing (S402, S404, S406) of the

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administrative information from/ in the main storage means (109) based on the judgment result.

Regarding Claim 11, Tsukada discloses auxiliary storage means (135) for auxiliary saving the administrative information if necessary, wherein the administering means writes the information read from the auxiliary storage means (135) in the main storage means (109) and deletes (*deletion of default count settings is implied in the flowchart of Fig. 4, since the default counts, which were initially written in the main memory, are overwritten by the current data supplied from the auxiliary storage*) the identification information saved in the main storage means (109) when the information read from the main storage means (109) includes the identification information (step S406).

Regarding Claim 12, Tsukada discloses at least one detachable unit detachably mountable into the main body of the apparatus (replaceable ink cartridge; paragraph 4), wherein the administrative information saved in the main storage means (109) includes information on the used state of at least one detachable unit (paragraph 67).

Regarding Claim 13, Tsukada discloses at least one detachable unit detachably mountable into a main body of the apparatus (replaceable ink cartridge; paragraph 4), wherein either one of the main storage (109) means and the auxiliary storage means (135) is provided in one detachable unit and the other thereof is provided in the detachable unit other than the one in which the one detachable unit is provided or in the main body of the apparatus (see Fig. 2).

Regarding Claim 14, Tsukada discloses (Abstract; Figures 1-4) an exchange storage unit (109; paragraph 122) replaceable for a storage unit mountable into an image forming apparatus (Fig. 1; 101) for saving administrative information on the used state of the apparatus (paragraphs 58-70) , wherein identification information (paragraphs 118-120) for distinguishing the exchange storage unit and the storage unit mounted in the apparatus from each other is saved beforehand.

Regarding Claims 15 and 16, the method steps thereof are met by the operation of the apparatus as disclosed by Tsukada as applied to claims 10 and 11 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukada (US 2002/0060703) in view of Tsuruya et al. (US 2003/0133719).

a. Tsukada discloses the elements as outlined in section 3 above.

b. Tsukada differs from the instant claimed invention in not disclosing the developer including a developer information storage means for saving developer information, and wherein when the developer is to be detached from the main body of the apparatus the administrative means controls reading/ writing from this developer prior to detachment.

c. Tsuruya et al. disclose (Abstract; Figures 1, 3A, and 10): a developer including a developer (24) information storage means (R) for saving developer information (remaining toner, for example), and wherein when the developer (24) is to be detached from a main body of the apparatus an administrative means (100) controls reading/ writing from this developer (24) prior to detachment.

d. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the developer storing means and information control concepts as taught by Tsuruya et al. with the auxiliary memory printing apparatus of Tsukada for the benefit of a control method whereby storage units provided to developing-agent-containing members can be accessed in a precise manner. (Tsuruya et al.; Abstract, lines 11-14)

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukada (US 2002/0060703) in view of Shimada (US 2004/0073836).

a. Tsukada discloses the elements as outlined in section 3 above.

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b. Tsukada differs from the instant claimed invention in not disclosing notifying means for notifying an occurrence of an abnormality when an abnormality occurs in an access from the administering means to the main storage means.

c. Shimada discloses (Fig. 11 and paragraph 103) notifying means (33) for notifying an occurrence of an abnormality when an abnormality occurs in an access from an administering means (CPU) to a main storage means (111A).

d. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to employ the notifying means of Shimada with the auxiliary memory printing apparatus of Tsukada, since such a modification would merely represent the combination of prior art techniques and methods, according to their known functions, and yield predictable results, namely, notifying a user or service personnel of a problem involving access to a main memory element.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan P. Ready whose telephone number is (571) 272-9018. The examiner can normally be reached on Mon.-Fri., 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David M Gray/
Supervisory Patent Examiner,
Art Unit 2852

BPR